UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STEET
ATLANTA, GEORGIA 30303-8960

October 15, 1999

4APT-ARB

Howard L. Rhodes, Director
Department of Environmental Protection
Air Resources Management Division
Mail Station 5500
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

SUBJ: EPA's Review of Proposed Title V Permit
Seminole Electric Cooperative, Inc.
Seminole Power Plant, Palatka, Florida
Permit No. 1070025-001-AV

Dear Mr. Rhodes:

The purpose of this letter is to provide comments to the Florida Department of Environmental Protection (DEP) on the proposed title V operating permit for the Seminole Power Plant, which was posted on DEP's web site on August 31, 1999. Based on the Environmental Protection Agency's (EPA's) review of the proposed permit and the supporting information for this facility, EPA formally objects, under the authority of Section 505(b) of the Clean Air Act (the Act) and 40 C.F.R. § 70.8(c) (see also Florida Regulation 62-213.450), to the issuance of the title V permit for this facility. The basis of EPA's objection is that the permit does not fully meet the periodic monitoring requirements of 40 C.F.R. § 70.6(a)(3)(i), and does not address all operational requirements and limitations to ensure compliance with all applicable requirements as specified under 40 C.F.R. § 70.6(a)(1).

Section 70.8(c) requires EPA to object to the issuance of a proposed permit in writing within 45 days of receipt of the proposed permit (and all necessary supporting information) if EPA determines that the permit is not in compliance with the applicable requirements under the Act or 40 C.F.R. Part 70. Section 70.8(c)(4) and Section 505(c) of the Act further provide that if the State fails to revise and resubmit a proposed permit within 90 days to satisfy the objection, the authority to issue or deny the permit passes to EPA and EPA will act accordingly. Because the objection issues must be fully addressed within the 90 days, we suggest that the revised permit be submitted in advance in order that any outstanding issues may be addressed prior to the expiration of the 90-day period.

Pursuant to 40 C.F.R. § 70.8(c), this letter and its enclosure contain a detailed explanation of the objection issues and the changes necessary to make the permit consistent with the requirements of 40 C.F.R. Part 70. The enclosure also contains general comments applicable to the permit.

If you have any questions or wish to discuss this further, please contact Mr. Gregg Worley, Chief, Operating Source Section at (404) 562-9141. Should your staff need additional information they may contact Ms. Elizabeth Bartlett, Florida Title V Contact, at (404) 562-9122, or Ms. Lynda Crum, Associate Regional Counsel, at (404) 562-9524.

Sincerely,

/s/ James S. Kutzman, for

Winston A. Smith
Director
Air, Pesticides and Toxics
Management Division

Enclosure

cc: Mr. James R. Duren, Seminole Electric Cooperative

Enclosure

U.S. EPA Region 4 Objection
Proposed Part 70 Operating Permit
Seminole Electric Cooperative, Inc.
Seminole Power Plant
Permit no. 1070025-001-AV

I. EPA Objection Issues

1. Applicable Requirements - As a result of Comments 7.R and 9.R, PSD-based permit conditions A.10. and A.19. were removed from the title V permit. Since PSD permit conditions are considered to be applicable requirements for title V permits, it is unclear why these conditions were removed. Please provide the basis for removing these conditions from the permit, or replace them if they were removed in error.

2. Practical Enforceability - Condition A.3 specifies that steam electric generating units # 1 and # 2 are permitted to fire coal, coal with a maximum of 30 percent petroleum coke (by weight), No. 2 fuel oil, and on-specification used oil. Additionally, the condition limits the rate of petroleum coke combustion to no more than 186,000 pounds per hour (averaged over 24 hours). However, the permit does not contain adequate record keeping to demonstrate compliance with the fuel combustion limits.

   In order for an operational limit to be enforceable as a practical matter there must be a method of establishing compliance with that limit. While condition A.65, requires the source to maintain documentation verifying that the coal and petroleum coke fuel blends that are combusted do not exceed the 30 percent maximum petroleum coke by weight limit, the permit does not contain a requirement for the source to record the daily rate of petroleum coke combustion. Therefore, the permit should include a requirement that the source keep daily records of the mass processing rate of the petroleum coke that is burned in the electric generating units.

3. Appropriate Averaging Times - The particulate matter emission limits in condition A.5, the volatile organic compound (VOC) emissions limit in condition B.4 , and the visible emissions limits in conditions B.6, C.4, and D.4, do not contain averaging times. Because the stringency of emission limits is a function of both magnitude and averaging time, appropriate averaging times must be added to the permit in order for the limits to be practicably enforceable. An approach that may be used to address this deficiency is to include a general condition in the permit stating that the averaging times for all specified emission standards are tied to or based on the run time of the test method(s) used for determining compliance. If a specific averaging time is selected for the particulate matter emission limit in condition A.5, Region 4 recommends that a six-hour averaging time be used to be consistent with the requirements of permit condition A.40.

4. Excess Emissions - Condition A.19 includes the following permitting note:

> *Once a written agreement between Seminole Electric Cooperative and the Northeast District office has been acquired approving a "Protocol for Startup and Shutdown", the protocol is automatically incorporated by reference and is a part of the permit.*

EPA Region 4 believes that the "Protocol for Startup and Shutdown" should be subject to public and regulatory review, and processed as a permit modification. Please revise this permitting note to indicate that a permit modification will be required to incorporate this document once it has been approved by the District..

5. Periodic Monitoring: Condition A.50 of the permit requires the source to conduct annual testing for particulate matter. The statement of basis for the permit states that this testing frequency is justified by the low emission rate documented in previous emissions tests while firing coal and that the "Department has determined that sources with emissions less than half of the effective standard shall test annually."

While EPA has in the past accepted this approach as adequate periodic monitoring for particulate matter, it has done so only for uncontrolled natural gas and fuel oil fired units. The units addressed in condition A.50 use add-on control equipment to comply with the applicable particulate matter standard. In order to provide reasonable assurance of compliance, the results of annual stack testing will have to be supplemented with additional monitoring. Furthermore, the results of an annual test alone would not constitute an adequate basis for the annual certification of compliance that the facility is required to submit for these units.

The most common approach to addressing periodic monitoring for particulate emission limits on units with add-on controls is to establish either an opacity or a control device parameter indicator range that would provide evidence of proper control device operation. The primary goal of such monitoring is to provide reasonable assurance of compliance, and one way of achieving this goal is to use opacity data or control device operating parameter data from previous successful compliance tests to identify a range of values that has corresponded to compliance in the past. Operating within the range of values identified in this manner would provide assurance that the control device is operating properly and would serve as the basis for an annual compliance certification. Depending upon the margin of compliance during the tests used to establish the opacity or control device indicator range, going outside the range could represent either a period of time when an exceedance of the applicable standard is likely or it could represent a trigger for initiating corrective action to prevent an exceedance of the standard. In order to avoid any confusion regarding the consequences of going outside the indicator range, the permit must clearly state if doing so is evidence that a

standard has been exceeded and must specify whether corrective action must be taken when a source operates outside the established indicator range.

6. Periodic Monitoring - Condition B.4 specifies that volatile organic compound emissions shall not exceed 11.84 tons per year. Based on the short term limit for this unit (38.75 pounds per hour) and 8,760 hours of operation per year, unit 003 could emit 167.72 tons per year. Since this value exceeds the annual emission limit of 11.84 tons per year, the permit must be revised to ensure that the annual limit is not exceeded through restriction of operating hours or by some other enforceable means.

7. Practical Enforceability - The record keeping requirements of Condition B.10 are not specific enough to adequately demonstrate compliance with the hourly VOC emission limit. In addition to recording the application rate of surface coatings, the source must also maintain records for the density and VOC content of each coating that is used. Additionally, the permit must specify a record keeping frequency that corresponds to the averaging time required under Objection Item 3. If the averaging time is short, the proposed mass balance methodology may not be accurate enough to ensure compliance with the pound per hour limit.

8. Periodic Monitoring - Conditions C.9 and D.9 of the permit require that annual Method 9 tests be conducted for the units listed in the permitting notes. In most cases, this does not constitute adequate periodic monitoring to ensure continuous compliance with the visible emissions standard. The permit must require the source to conduct visible emissions observations on a daily basis (Method 22), and that a Method 9 test be conducted within 24 hours of any abnormal qualitative survey. As an alternative to this approach, a technical demonstration can be included in the statement of basis explaining why the State has chosen not to require any additional visible emissions testing. The demonstration needs to identify the rationale for basing the compliance certification on data from a short-term test performed once a year.

II. General Comments

1. Compliance Certification - Facility-wide Condition 12 of the permit should specifically reference the required components of Appendix TV-3, item 51, which lists the compliance certification requirements of 40 C.F.R. 70.6(c)(5)(iii), to ensure that complete certification information is submitted to EPA.

2. Prorated Emission Limits for Sulfur Dioxide and Nitrogen Oxides - Conditions A.11 and A.15 provide equations for determining the applicable standards for sulfur dioxide and nitrogen oxides, respectively. Since compliance is determined on a 30-day rolling average basis, and the proportions of liquid and solid fuels is

likely to change over any given 30-day period, the permit should explain how these compliance limits are calculated to correspond with the emissions data.

3. Excess Emissions - Conditions A.19 and A.20 address the occurrence of excess emissions from the electric generating units. More specifically, excess emission resulting from malfunction are permitted provided that best operational practices to minimize emission are adhered to and the duration of excess emissions are minimized. EPA has recently addressed the issue of excess emissions in a September 20, 1999 policy memorandum from Steven A. Herman, Assistant Administrator for Enforcement and Compliance Assurance and Robert Perciasepe, Assistant Administrator for Air and Radiation. The September 20, 1999 memo reaffirms and supplements the EPA's original policy regarding excess emissions during malfunction, startup, shutdown, and maintenance, which is contained in memoranda from Kathleen Bennett, formerly Assistant Administrator for Air, Noise and Radiation dated September 28, 1982 and February 15, 1983. The permit conditions that address excess emissions should be consistent with EPA's policy.

4. Minimum Sample Volume for Particulate Testing - Condition A.40. specifies a sample time and volume of at least 120 minutes and 60 dry standard cubic feet, respectively, for particulate testing, in accordance with 40 CFR 60.48a(b) and 40 CFR 60.11(b). Condition A.48 specifies a sample time from one to four hours and a minimum sample volume of 25 dscf, or other volume as required by rule. Since these permit conditions are inconsistent, a permitting note should be added to Condition A.48. to clarify the required sample time and volume, or refer the permittee to Condition A.40.

5. Frequency of Compliance Tests - Condition B.9 is unclear about whether compliance testing is required on an annual basis, or just prior to renewal. Conditions C.9 and D.9 each contain permitting notes which clarify which units are to be tested annually, if any. A similar permitting note should be added for Condition B.9.

6. Acid Rain - The Phase II Acid Rain Application/Compliance Plan dated December 5, 1995, the Phase I Acid Rain permit dated March 27, 1997 and the Phase II NOx Compliance Plan dated November 21, 1997 which are referenced as attachments made part of the permit should also be referenced under Section IV, Subsection A.1.

7. Acid Rain - We recommend that a note be placed in Section IV, Subsection A, A.2, referencing the NOx requirements indicated under Subsection B, B.2 . This note should clarify that Florida DEP has approved and incorporated the NOx Early Election requirements into the Phase II permit (part).